PROJECT ID: P-1VCPDBR
Van Cortlandt Park Pedestrian Bridge over Major Deegan Expressway
Borough of The Bronx

Presentation to Community Boards 8
March 28, 2018

NYC DDC Department of Design and Construction

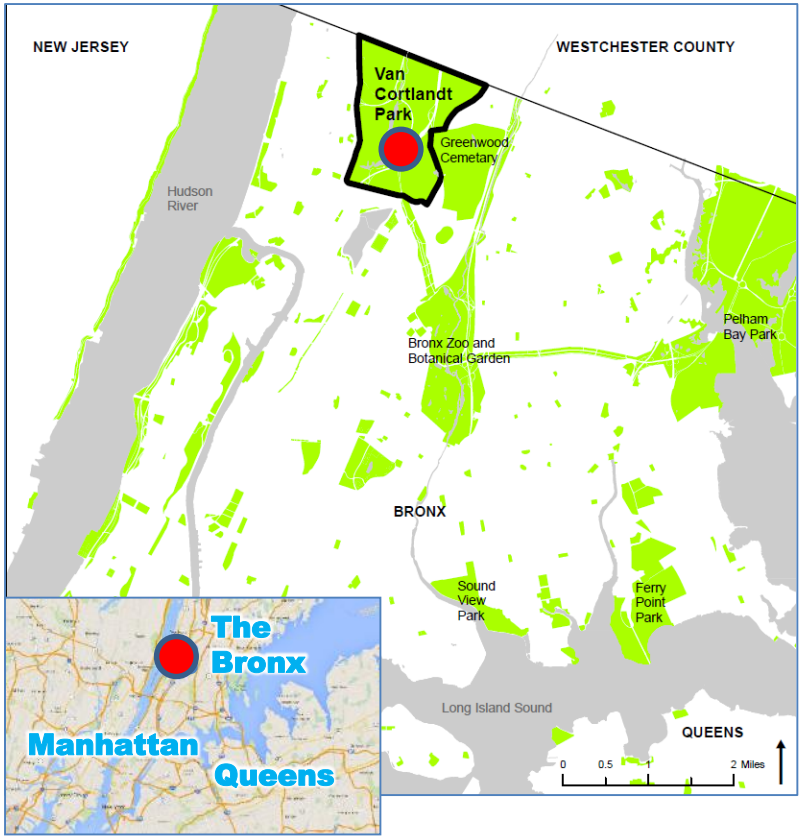
NYC Parks

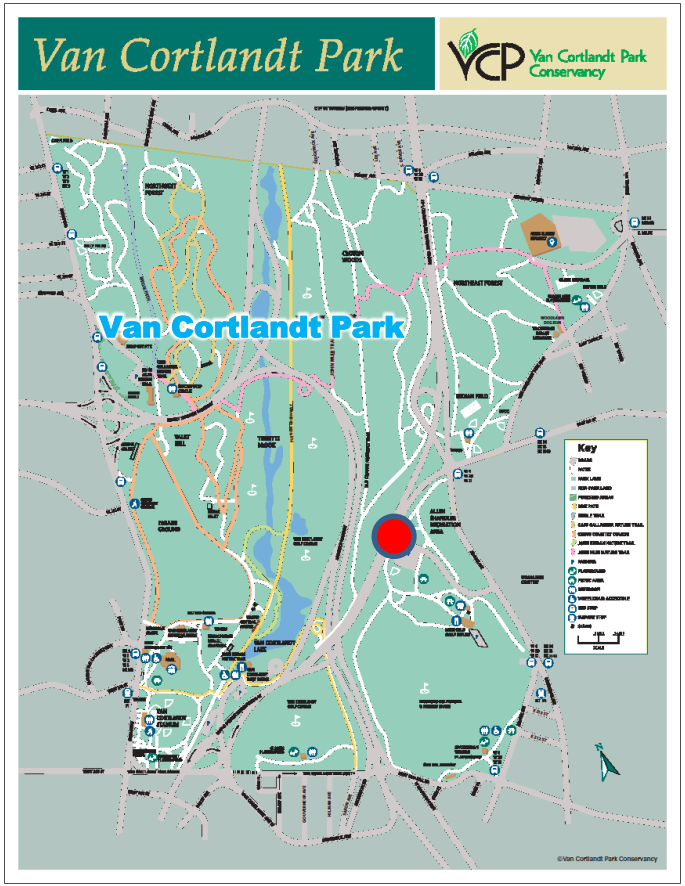
PARSONS

AGENDA

- PROJECT LOCATION
- CONTEXT
- PROJECT HISTORY
- GUIDING PRINCIPLES
- SITE CONDITIONS
- DESIGN PARAMETERS
- TREE IMPACTS
- ACTION ITEMS

PROJECT LOCATION





PROJECT HISTORY
CROTON FILTRATION PLANT MITIGATION

NYCDEP-NYC Parks Memorandum of Agreement of Sept. 2005 states:

DEP will undertake a study to determine whether or not a footbridge crossing over the Major Deegan Expressway is "technically, legally and financially feasible."

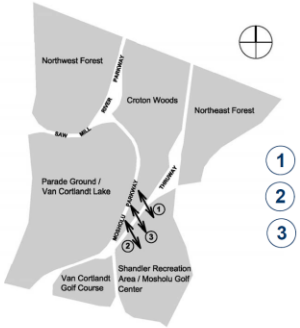
PROJECT HISTORY
NYCDEP FEASIBILITY STUDY

Van Cortlandt Park
I-87 Pedestrian Bridge F

Presenta

PHA Philip Habib & Associates

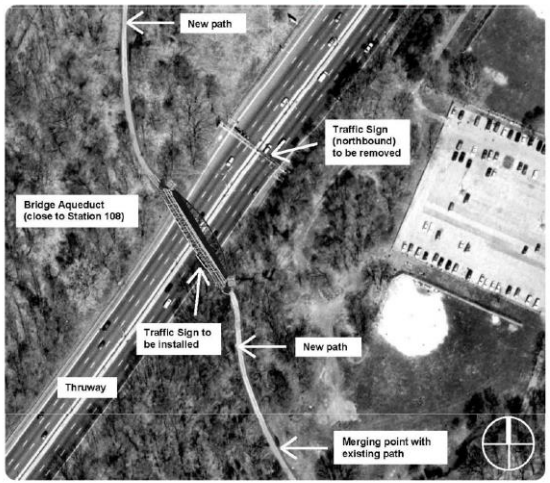
Three Final Alternatives



1. Thruway Bridge North
2. Thruway Bridge South
3. Thruway Bridge Aquec

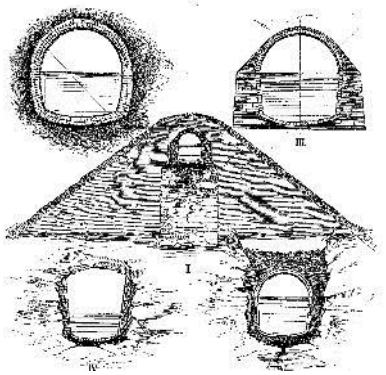
9

Preferred Bridge Location:
Thruway Bridge Aqueduct



16

CONTEXT - OLD CROTON AQUEDUCT TRAIL



DESIGN AND CONSTRUCTION EXCELLENCE 2.0 GUIDING PRINCIPLES

GROWTH

Connects neighborhoods by removing a major pedestrian barrier in the park.

Reinforces the value and expands access to one of New York City's great parks.

Provides continuity for the Old Croton Aqueduct Trail in the park, and connects to other segments in the Bronx, including north to Westchester and south to Aqueduct Walk and the High Bridge.

EQUITY

Provides an inviting and accessible pedestrian route over the Major Deegan, with minimal disturbance to the park.

Promotes interaction between residents of diverse neighborhoods surrounding the park by creating an attractive linkage

Provides universal accessibility for pedestrians between existing pathways and an elevated deck over the highway.

SUSTAINABILITY

Enhances the forest ecosystem by clearing harmful invasive plants and planting new trees and ground covers.

Reduces community reliance on private vehicles for access to recreational facilities on the east and west portions of the park.

Existing subsurface material from construction excavation reused as fill mateiral under elevated walks at transitions between on-grade paths and elevated walkways.

RESILIENCY

Enhances the forest landscape with a resilient plant palette used to revegetate areas of the park that are disturbed during construction.

Minimizes urban heat island effect with the use of light colored concrete paving, with higher albedo, on bridge and ramps.

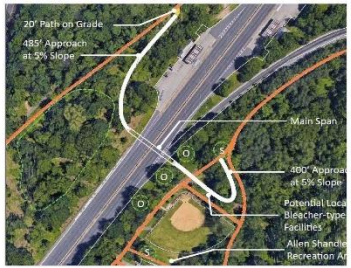
Protects stormwater absorbtion functions of wooded park landscape by minimizing the footprint of the bridge and approach ramps.

HEALTHY LIVING

Promotes walking and jogging by providing an expanded option of routes through the park through greater connectivity of trail segments.

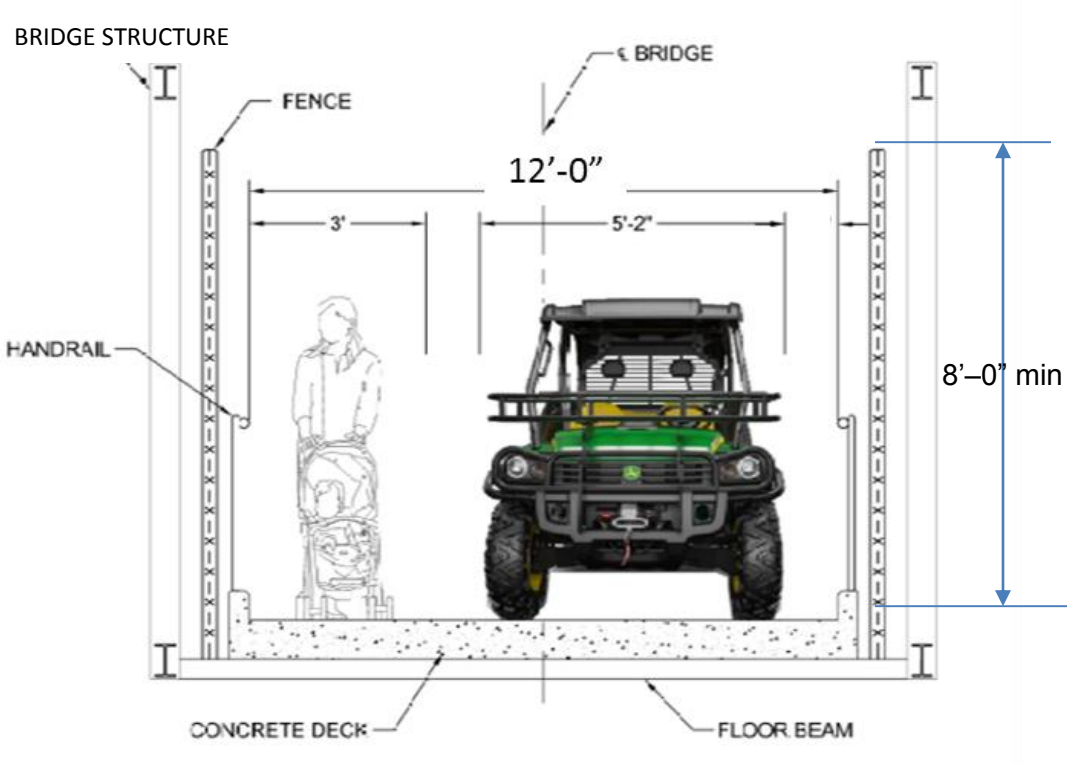
Provides access for surrounding communities to portions of the park that have been difficult to access since the construction of the Major Degan.

Minimizes impact on Van Cortlandt Park by causing minimal disturbance and preserving existing mature trees which provide ecological services to surrounding neighborhoods.

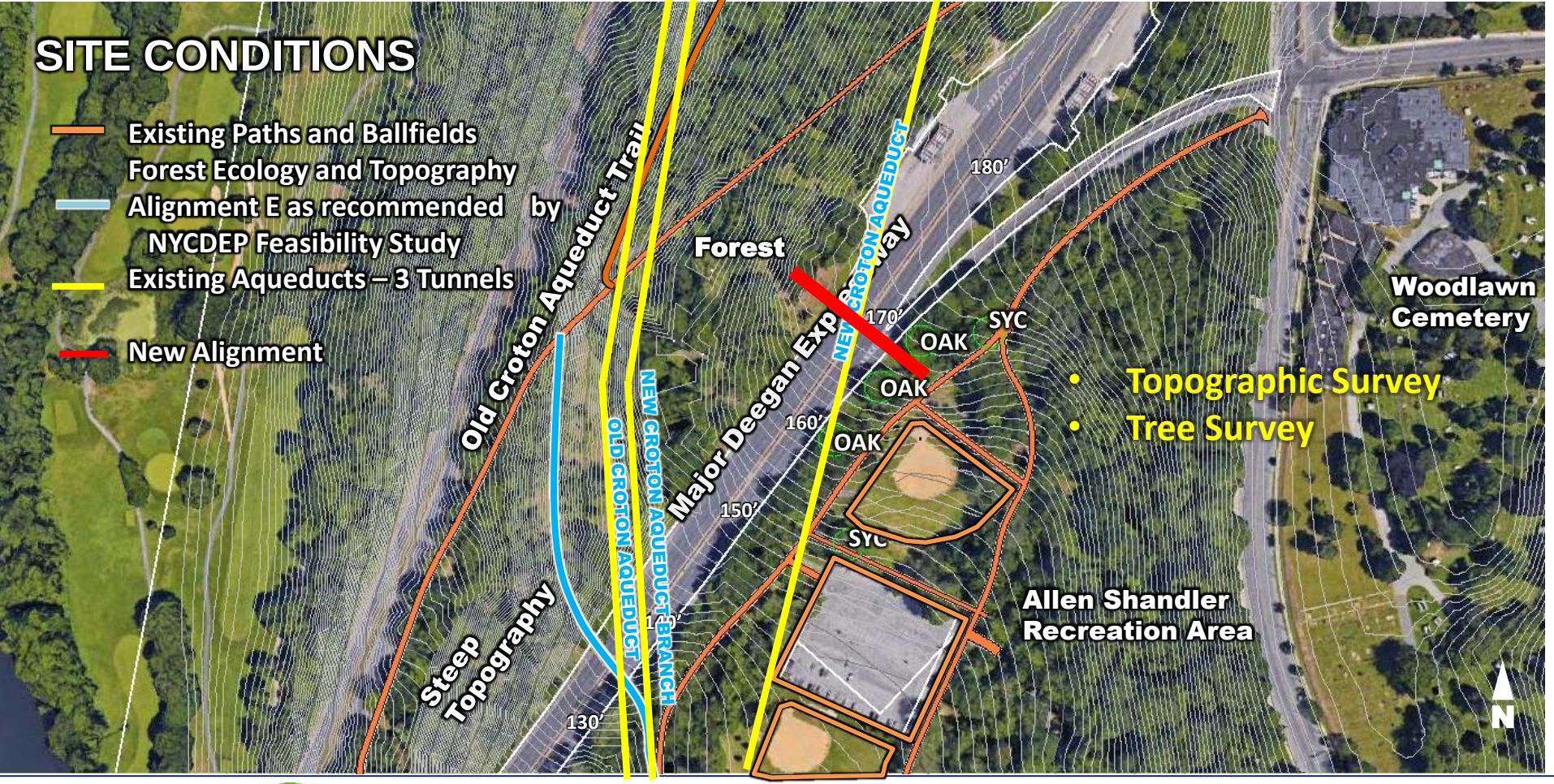


DESIGN CRITERIA – SPAN & VERTICAL CLEARANCE

DESIGN CRITERIA - BRIDGE CROSS SECTION



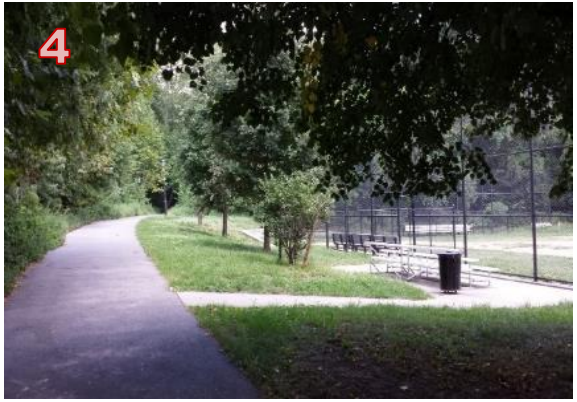
SITE CONDITIONS

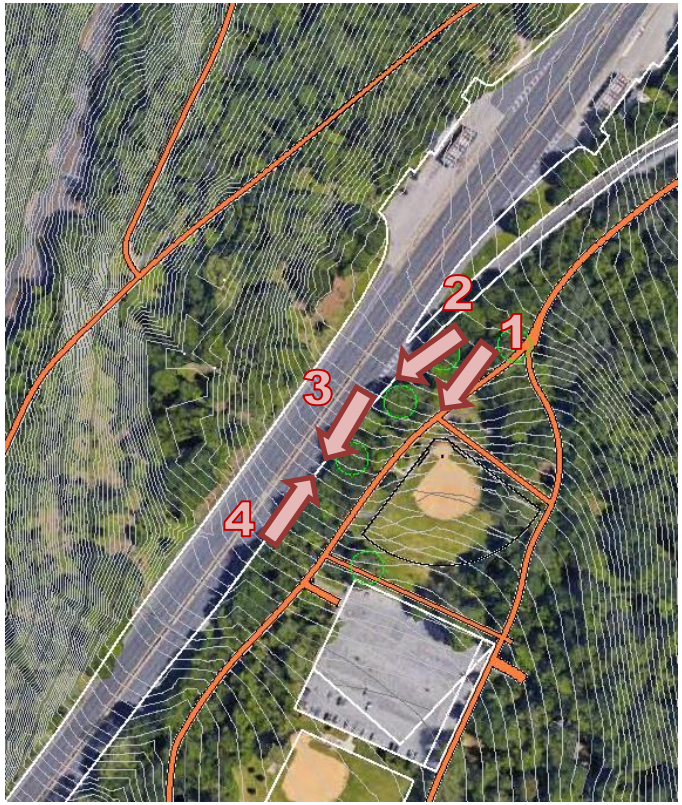


- Topographic Survey
- Tree Survey

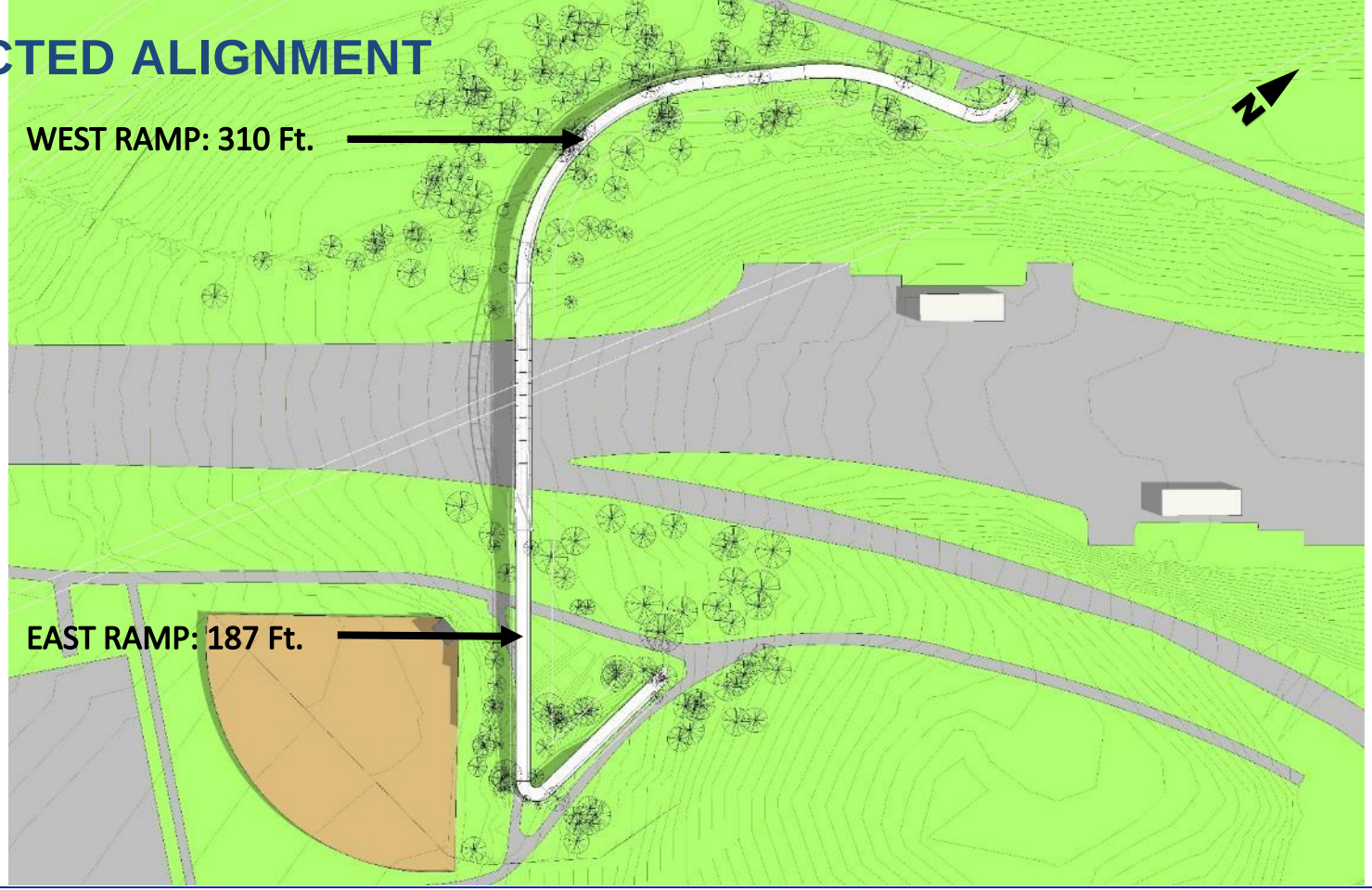
SITE STUDY – FORESTRY & TOPOGRAPHY - WEST APPROACH RAMP AREA

SITE STUDY – FORESTRY & TOPOGRAPHY - EAST APPROACH RAMP AREA





SELECTED ALIGNMENT



ARCH/TIED ARCH BRIDGE

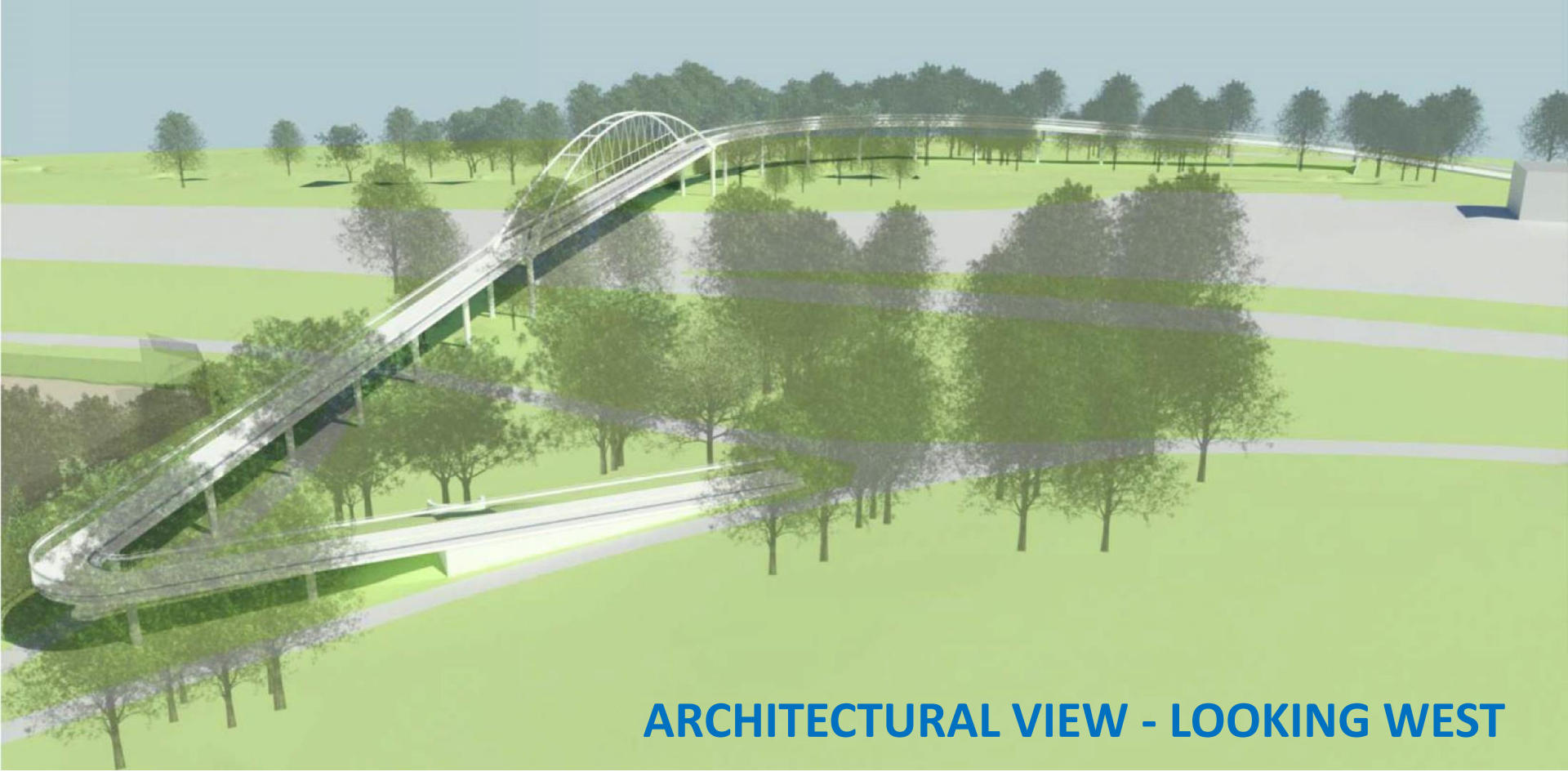
- SUITABLE FOR LONGER SPANS
- PREFABRICATED (ROLLED) COMPONENTS
- EASE OF CONSTRUCTION/ERECTION
- AESTHETICALLY BETTER LOOKING

RAMP ALIGNMENT: WOODLAND RAMPS

RAMP TYPE – 18 INCH CONCRETE FLAT SLAB

ELEVATION – LOOKING NORTH

VIEW OF THE BRIDGE



ARCHITECTURAL VIEW - LOOKING WEST

ARCHITECTURAL VIEW LOOKING EAST

CLOSE-UP VIEW – BRIDGE AND RAMP

PRELIMINARY TREE IMPACTS

EAST RAMP & PATH (Shandler Ballfields)

Tree Removals	Approx. 35

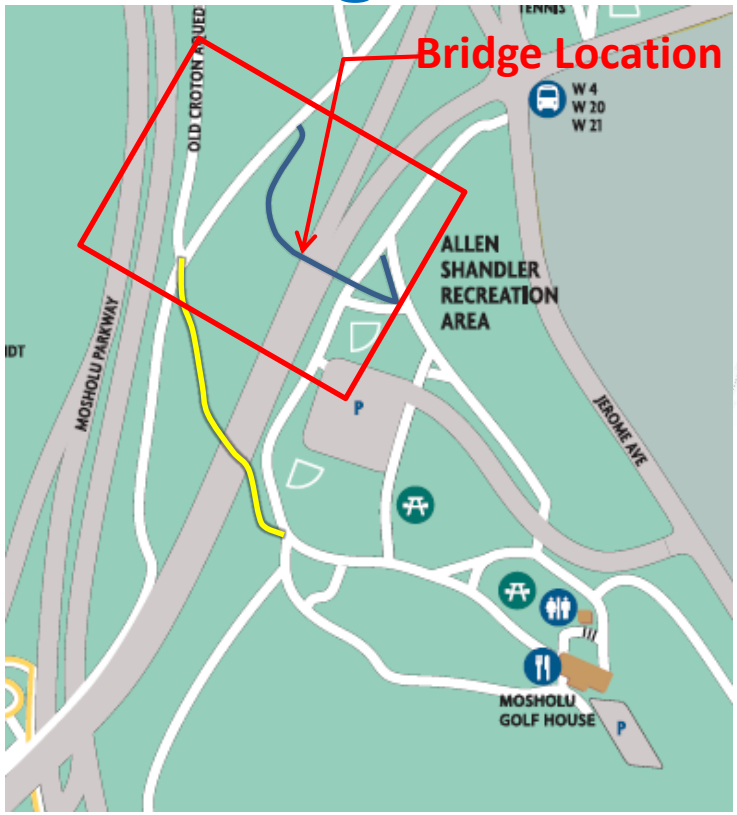
WEST RAMP & PATH (Forest)

Tree Removals	Approx. 47

Total Tree Removal	Approx. 82

Tree species, health and size will be considered as design progresses. The route will be adjusted where possible.

Connecting Trail



Option 1:
1350 Feet
7-9 Min.

Option 2:
400 Ft
2-3 min.
Additional Cost $1 m

RETAINING WALL RAMPS – TRANSITION TO GRADE

Retaining Wall Ramps
Aesthetic Options

Multiple aesthetic options

Graded Ramps

ACTION ITEMS:

PRESENT TO CB/PDC	FEBRUARY/MARCH 2018
COMPLETE PRELIMINARY DESIGN	2Q 2018
COMPLETE FINAL DESIGN	JANUARY 2019*
BID CONTRACT	JUNE 2019
START CONSTRUCTION	JANUARY 2020
COMPLETE CONSTRUCTION	DECEMBER 2021

(*EXPEDITED DESIGN SUBJECT TO REGULATORY APPROVALS AND APPROVALS FROM VARIOUS STAKEHOLDERS)

THANK YOU